

System Event Conditions and User ID Handling
ADABAS/NATURAL/NATURAL Security

Unplanned System Event Descriptions See footnotes	TEST USAT1 (sec.)	TEST USAT2 (sec.)	PROD Share (sec.)	PROD HD (sec.)	PROD SC (sec.)	PROD HD-Arc (sec.)	PROD SC-Arc (sec.)	Effect	Action
ADABAS A FIND (Sx) command has been interrupted because the maximum amount of time permitted has been exceeded. - Time limit for Sx commands TLSCMD - Max. Sx execution time MXTSX	60 3,600	60 3,600	60 3,600	60 3,600	300 3,600	60 3,600	300 3,600	NAT3007: Natural receives ADABAS response code 7 Data volume might be increased	The FIND command is not selective enough, change the program or make the selection criteria more selective
ADABAS The user was backed out because the Hold Queue was full.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NAT3009 - subcode 1 (hexadecimal = hex) 1 (decimal)	One or more of the following: 1. Tune the application to hold fewer records. 2. Tune the application to issue more ET commands. 3. Increase the value of the ADARUN Hold Queue (HQ) parameter.
The ADABAS transaction time limit has been exceeded, and the transaction was backed out, for example read with hold / update / end of transaction - Transaction Time (TT) - Max Transaction Time (MXTT)	1,200 1,200	1,200 1,200	1,200 1,200	1,200 1,200	1,200 1,200	1,200 1,200	1,200 1,200	NAT3009 - subcode 2 (hex) - Back out transaction - Release all CIDs. - Close the UQE - Erase file list (except EXU)	Restart the transaction from the top
The ADABAS transaction non-activity time limit has been exceeded. For example the time between two ADABAS calls - Non-activity ACC-User (TNA A) - Non-activity ET-User (TNA E) - Non-activity EXU-User (TNA X) - Max Non-activity Time (MXTNA)	86,400 86,400 1,800 65,535	86,400 86,400 1,800 65,535	172800 172800 1,800 65,535	86,400 86,400 1,800 65,535	86,400 86,400 1,800 65,535	86,400 86,400 1,800 65,535	86,400 86,400 1,800 65,535	NAT3009 - sub-code 3 (hex) - Release all CIDs. - Close the UQE - Erase file list (incl. EXU) - Set timeout status (only EXU)	Restart the last ADABAS command
ADABAS The user was backed out because a pending WORK area overflow occurred during this operation.	LP= 65535	LP= 65535	LP= 65535	LP= 65535	LP= 65535	LP= 65535	LP= 65535	NAT3009 - sub-code 15 (hex); 21 (decimal)	Either reduce the transaction length to lessen the data protection area requirement, or increase the protection area on WORK.
ADABAS The user queue element (UQE) file list is full. The user is backed out; that is, a BT is issued for the user. Only until ADABAS version 6.2.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NAT3009 - sub-code 16 (hex); 22 (decimal)	ADABAS automatically increases the size of the UQE file list and all new UQE file lists by 25%. Restart the transaction.
ADABAS An invalid command ID value was detected. ADABAS lost the CID after NAT3009	See TT or TNAx	See TT or TNAx	See TT or TNAx	See TT or TNAx	See TT or TNAx	See TT or TNAx	See TT or TNAx	NAT3021 An invalid global format ID was specified (blank?)	Restart the last ADABAS command or the last transaction from the top

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ADABAS The restart user ID specified in the OPEN command is already in use by another user.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NAT3048 - sub-code 8 User ID is rejected	Try another restart user ID or wait until time limit exceeded
ADABAS Command Timeout Limit (CT) The maximum number of seconds (more precisely, units of 1.048576 seconds) that can elapse from the time an ADABAS command has been completed until the results are returned to the user through the inter-region communication (operating-system-dependent). This parameter is used to prevent a Command Queue Element and attached buffer from being held for a long period of time for a user who has terminated abnormally.	3,600	3,600	3,600	3,600	3,600	3,600	3,600	ADABAS Response Code 254 1. A BT command will be executed (if applicable and necessary); 2. The Command Queue Element and attached buffer will be released; and 3. If the user has not terminated, a message ADAM93 is printed and response code 254 is returned to the user program.	Possible causes of a command timeout are: - User region that is swapped-out or cannot be dispatched; - User cancelled; - Low priority of user in high activity system. RESTART the program
NATURAL Session Parameter Too many database calls - program interrupted (MADIO)	0	0	0	0	0	0	0	NAT1009 Program terminates	Restart the program
NATURAL Session Parameter Maximum amount of CPU time exceeded (MT)	0	0	0	0	0	0	0	NATxxxx Program terminates	Restart the program
NATURAL Session Parameter Processing loop limit (LT)	999999 99	999999 99	999999 99	999999 99	999999 99	999999 99	999999 99	NAT1701 LOGOFF	
NATURAL Session Parameter Wait for record in hold status (WH)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	NAT3145	Restart the transaction
NATURAL Security - limits per library Non-activity logoff limit (seconds) exceeded Maximum transaction duration (seconds) Maximum number of source lines Maximum amount of CPU time (MT;seconds) Maximum number of ADABAS calls (MADIO) Maximum number of program calls (MAXCL) Processing loop limit (LT)	Not set Not set 99999 Not set Not set Not set Not set	Not set Not set 99999 Not set Not set Not set Not set	Not set Not set 99999 Not set Not set Not set Not set	Not set Not set 99999 Not set Not set Not set Not set	Not set Not set 99999 Not set Not set Not set Not set	Not set Not set 99999 Not set Not set Not set Not set	Not set Not set 99999 Not set Not set Not set Not set	NAT1701 - LOGOFF NAT1703 - back-out	ENTER - NSC LOGON Restart transaction
NATURAL Security - User Exits LOGONEX*, NSC**EX1	Not used	Not used	Not used	Not used	Not used	Not used	Not used	No time-outs used	

System Event Conditions and User ID Handling ADABAS/NATURAL/NATURAL Security

Planned ICIS System Unavailable	TEST USAT1 (sec.)	TEST USAT2 (sec.)	PROD Share (sec.)	PROD HD (sec.)	PROD SC (sec.)	PROD HD-Arc (sec.)	PROD SC-Arc (sec.)	Effect	Action
Maintenance window every Saturday from 8:30 PM - 1:00 AM Before 8:30 PM, the system is down (IPL)	No	No	No	No	No	No	No	ADABAS response code 148, all databases are not active.	Try later
Daylight saving changes	No	No	No	No	No	No	No	ADABAS response code 148, all databases are not active.	Try later

User IDs, User Queue Elements (UQE), tableBase Tables

ICIS users are "ET-Users" by definition and the required OPEN command is supported automatically by NATURAL.

At the end of a session, a CLOSE command will be issued, the UQE will be kept, and only the file list will be deleted. This allows that the same user ID can use the same UQE again.

The CLOSE command will only be applied by calling the DBAs subprogram D99XIT.

The tableBase tables will automatically be closed by NFTBCL program during Com-plete's logoff.

ADABAS and NATURAL Response Codes

All response codes should be checked in a central error routine. Software AG strongly recommends the use of *ERROR-TA to pass information from the failed program.

Every error code has to be handled in a different way, for example start the entire transaction, restart the last command, restart the program, logon again, etc.

All Messages and Codes Manuals are available though our ICIS HELP Facility, that is located on APPSICIS on NIGHTHAWK ==> I:\ICIS\icishelp\HTML\index.html

ADABAS Version 6.2.2 Messaged and Codes ==> I:\ICIS\icishelp\HTML\Adabas\Ada622\pdf\mac\2-resp.pdf

NATURAL Manuals and tips ==> I:\ICIS\icishelp\HTML\NAT000.HTM or ==> I:\ICIS\icishelp\HTML\NATURAL\Nat312\default.htm

NATURAL Parameters

NATURAL parameters can be set-up at different levels..

- Via the default parameter module NATPARM during installation (MT, LT, WH)
- Via dynamic parameters specified when invoking Natural (MT, LT, WH)
- Via the system command GLOBALS (MT, LT, WH)
- Via a SET GLOBALS statement; in reporting mode only (MT, LT, WH)
- Via a FORMAT statement (MP)
- Via parameter specifications within statements, for example INPUT, DISPLAY, and WRITE (MP)
- Via terminal commands
- Via ADABAS direct commands in Natural
- Via a Natural library in Natural Security

The above-mentioned values are installation values only

Remarks: 172,800 / 3600 = 48 minutes -- 86,400 / 3600 = 24 minutes – 65535 / 3600 = 18.2 minutes